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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,741

10/06/2006

Koji Ikeda

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3538

52123 7590 08/03/2009
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EXAMINER

STEPHENS, JUANITA DIONNE

ART UNIT

PAPER NUMBER

2853

NOTIFICATION DATE

DELIVERY MODE

08/03/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/599,741	Applicant(s) IKEDA, KOJI	
	Examiner Juanita D. Stephens	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Application filed 10/06/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 12-14 is/are rejected.
- 7) ☒ Claim(s) 3-11, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/8/2007, 8/25/2008</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 01/08/2007 and 08/25/2008 is being considered by the examiner.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

3. Claim 12 is objected to because of the following informalities:

In claim 12, line 3 delete "and".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ono et al. (US 5,971,522).

Ono et al. teaches an inkjet printhead (20) (Fig. 1) comprising: 1) a nozzle plate (42) in which a nozzle (42a) that discharges ink is formed (col 5, lns 19-21), 2) a pressure application section (41) that applies pressure to ink (col 5, lns 55-65), 3) a

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nozzle plate holding member that holds said nozzle plate (col 6, Ins 8-15), 4) a head plate (21) that holds a plurality of ink discharge units (22Y through 22Bk-4) composed of at least said nozzle plate and said pressure application section and said nozzle plate holding member, 5) a sealing member (adhesive agent 23) that seals a gap between said ink discharge unit (22Y through 22Bk-4) and said head plate (21) so that air does not pass through and supports said ink discharge unit movably with respect to said head plate (21) by itself being deformed (col 4, Ins 32-36), 6) a fixing member that fixes said ink discharge unit (22Y through 22Bk-4) and said head plate (21) after a gap between said ink discharge unit and said head plate is sealed by said sealing member (23) and alignment of said ink discharge unit with said head plate (21) is performed (col 6, Ins 52-67), 7) wherein said fixing member fixes said ink discharge unit (22Y through 22Bk-4) to said head plate in an attachable and removable fashion, 8) said pressure application section (41) comprises: a diaphragm that moves relative to said nozzle plate (42), a piezoelectric element that drives said diaphragm, and a direction of relative movement of said diaphragm is a direction approximately parallel to a discharge direction of an ink drop from said nozzle (col 5, Ins 45-65), and 9) an inkjet recording apparatus (col 1, Ins 8-10) and a nozzle pitch detection section that detects spacing of said nozzles of said inkjet heat (col 6, In 62-col 7, In 6). With respect to the method of claim 14, no patentable weight is give, since, it has been head that determination of patentability of a product is based on the product itself and does not depend on its method of production.

Allowable Subject Matter

6. Claims 3-11 and 15-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 6-11 and 15-16 will be allowed when claim 5 is rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach, suggest or render obvious the combination of an ink repellence processing performed on at least part of a surface of said head plate on a side on which ink is discharge, recited in claim 3. This invention solves the problem of preventing ink discharge defects.

The prior art does not teach, suggest or render obvious the combination of an ink repellence processing performed on a side on which ink is discharge of part of a wall surface of said aperture that is not in contact with said sealing member, recited in claim 4. This invention solves the problem of preventing ink discharge defects.

The prior art does not teach, suggest or render obvious the combination a temperature changing section that changes a temperature of said head plate, wherein, changing a temperature of said head plate by means of said temperature changing section, thermal expansion and contraction of said head plate is caused, and spacing of said nozzles of said ink discharge units is maintained at a desired value, recited in claim

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5. This invention solves the problem of maintaining nozzle pitch at a constantly desired value, while improving ink drop impact positioning.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juanita D. Stephens whose telephone number is (571) 272-2153. The examiner can normally be reached on Flex (Monday-Friday 9:00 am -5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Juanita D. Stephens
Primary Examiner
Art Unit 2853

/Juanita D. Stephens/
Primary Examiner, Art Unit 2853
July 28, 2009